Omnipoint's proprietary technology provides a number of advantages over cellular and other PCS technologies, including:

- Significantly lower infrastructure costs resulting in significant reductions in per minute costs and facilitating competition with wireline telephone systems for certain market segments.
- · Compatibility with GSM and central office switch infrastructures.
- Wireless services that provide wireline quality voice and superior data, multimedia and digitized compressed video and imaging capabilities.
- A single handlet protocol that is capable of being operated with either public mobile networks or private systems such as PBXs and home confless telephone systems.
- A variable bandwidth on-demand protocol allowing future applications to be written by end users and service operators instead of equipment vendors.

The Company's technology is flexible enough to be deployed in both large, developed, metropolitan centers and leas-developed, rural areas, both domestically and internationally. The Company believes that the technical characteristics and low cost of the Oranipoint System allows for the wide-spread deployment of telecommunications services while avoiding the high-cost of wire-based infrastructure, making the Oranipoint technology particularly well-maited for many countries which are currently upgrading or developing their telecommunications infrastructure. The Company has entered discussions with telecommunications services providers from several countries including Argentina, India, Mexico and South Kerea.

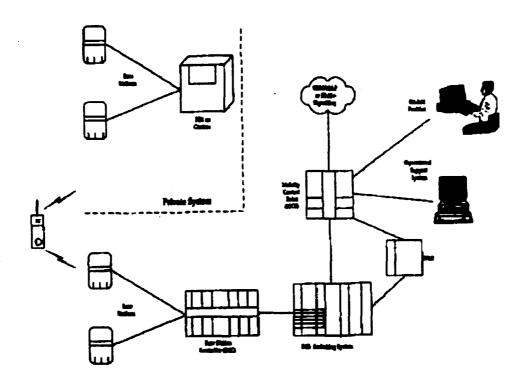
#### Overlpoint System Architecture

The Omnipoint System is the commercial result of enhancements made to the technology developed by the Company, particularly in the areas of protocol design and spread spectrum. The Company's extensive metarch and field testing of the Omnipoint System has provided a thorough understanding of the technical and business challenges facing PCS providers. As a result, the Company has designed a system that overcomes many of the architectural weaknesses of existing wireless networks.

The Omnipoint System provides an exchitecture that utilizes the special benefits of CDMA. TDMA and FDMA technologies for multiple-user access to PCS networks, without incurring many of the problems inherent in these technologies as used in traditional wireless systems. Omnipoint's unique approach combines the major advantages of these technologies in a hybrid solution that provides significant price and performance advantages over systems that rely upon only one technology for separating users and cells. In particular, the cost of radio hardware, especially infrastructure hardware, can be significantly reduced. Omnipoint's use of wide hand speed spectrum minimizes the effects of interference, extends cell area and allows for the use of a high data rate. Instead of implementing spread spectrum for classic CDMA reasons, i.e., to separate simultaneous users within a cell by using different codes, the Company employs spread spectrum to reduce the cost of enhancing capacity using TDMA within a cell, while using CDMA between cells that use the same frequencies.

The Omaipoint GSM System has an expected cell radius ranging from seven miles to 250 feet. The Base Station in each cell is connected by microwave, fiber optic cable or telephone wises to the BSC. The BSC in turn connects to the PCSS which uses adjunct computers to control the operation of the wiseless telephone system for its entire service area. The BCS and PCSS control the transfer of calls from cell to cell as a subscriber's handset travels, manage call delivery to hundrets, allocate calls among the cells within the System, connect calls to local landline telephone system or to a long distance telephone carrier, and provide most of the features such as call waiting and three way calling.

The following diagram illustrates the Omnipoint System as deployed in a complete network environment.



^_	 _
_	_

#### Base Station (BS)

#### Description

Base statem radio equipment located at a "coll sign" supports 32 full deplox voice channels per 3.75 MHz of RF bandwidth or 16 voice channels per 1.875 MHz. The base station occurrents to the BSC or directly to the natural, using standard inhocumumatications insurfaces. A call's diameter can range from 14 milios to as little as a flow hundred fact depending on the nature of area being served (urban, subartan or semi).

Base Station Controller (MCC)

The BBC merives inputs from multiple base stations, performs inter-inse station hand-offs, converts and firmusis channel and signaling information for presentation to the network, manages visiting subscribers, and provides smiliple network interfaces and basic administrative features.

Home Lousing Register (HLR)

A home location register records subscriber and usage information.

Visitor Location Register (VLR)

The location register typically located at the BSC or BS other than the HLR used by the mobility switching contex to direct the handling of calls to or from an active visiting subscriber.

PCS Switching System (PCSS)

The PCSS provides connection and advanced switching of traffic to and from BSCs and provides interconnection to the PSTN and long-distance courses activates.

Mobility Control Point (MCP)

The MCP coordinates and executes hand-offs burness switches.

Hendetts

The handest can econ to any of the over 56 &F channel contex frequencies within the 1850-1990 MHz band at any best station in roughly 500 microseconds.

**OAAM Position** 

Operations, Administration and Maintenance position is the human component of the operational support system which incorporate a plan designed to preserve network integrity, avoiding testing information.

Operational Support System

The operational support system supports the CARM position and covers diagnostics, maintenance, instead the support of the system of the system

#### Overipoint System Advantages

The Company designed the Omnipoint System to satisfy several specific, market-driven requirements. The Company believes that, at a minimum, a PCS system must offer localized coverage at least as compachensive as that of cellular, including in-vehicle use with high-speed hand-off capability. The key differentiating features of the Omnipoint System, as evidenced by extensive field testing, are:

## · Significantly Lower Infrastructure Costs

Low Deployment Costs. The Company designed the Omnipoint System to provide fully functional, fully mobile PCS at per subscriber capital costs substantially below those of cellular and other mobile PCS systems. The Company believes that it can deploy the radio access portion of the Omnipoint System, which accounts for 75% to 85% of the costs of typical cellular systems, for approximately \$300 per subscriber. These infrastructure costs can be achieved at subscriber penetration levels as low as two to fisce percent in most cities. The Company estimates that initial capital costs for other systems may be as much as \$800 to \$1,000 per subscriber at similar penetration levels. The Company expects that wholesale, unsubsidized handset prices will stant at approximately \$350 to \$450 per unit and decline with increased volumes.

Low Incremental Capital Costs. Osmipoint expects that a PCS provider deploying the Osmipoint System will experience energies capital expenditures, excluding incremental switching costs, that will seach less than \$150 per subscriber. Omnipoint achieves these cost savings as a result of its hybrid solution. The cost of FDMA-only and CDMA-only systems increases on a linear basis because (i) changels are expensive and are built and priced on a per changel basis, (ii) the equipment is large and requires extensive cell site planning, building permits, site acquisition and preparation, and zoning approval, and (iii) each cell must be able to independently handle localized peak loads, although such peak loads can occur for less than one hour per day. In contrast, because each compact Omnipoint bene station needs only one set of core electronics for up to 32 simultaneous users, the implicit cost per voice channel declines as the number of voice channels used simultaneously increases (up to the capacity limit of each base station). The primary basefit of this capability is significantly reduced expenditures on a per-call basis. Even when new cell sites are required, the low cost of individual Camipoint cell sites causes the marginal cost per new subscriber to remain low relative to alternative systems. Further, the Sexibility of the Omnipoint technology allows the network operator to configure for the average simultaneous peak load across the natwork, rather than the sum of all the individual calls peak load conditions regardless of when they occur.

Repid Deployment. The compact size of the Omnipoint base station, as small as 13" x 14.5" x 27", will significantly ease zoning and installation concerns and reduce their associated costs. The Oranipoint System can provide additional especity wherever it is acaded while maintaining significant economic advantages. These base stations can support the same 32 voice channels typically provided by the larger, bulklor cellular equipment. With these traditional cellular systems, increasing the number of cell sites requires relocation of their large, current cells and the acquisition of additional large sites. Oranipoint base stations and autournes are easily attached to existing telephone poles, light poles or other available structures. Oranipoint's cell sites on an installed basis are expected to be less than 30% of the cost, on a per channel basis, of the cell sites of systems that use traditional cellular or PCS technologies.

## Improved Performance Characteristics

Increased System Capacity. With all wireless technologies, the minimum cell radius determines the maximum number of cells per area and thus a wireless system's geographic capacity. For example, the capacity of existing cellular systems is ultimately constrained by its minimum cell radii, which is typically approximately one half mile. The Osmipoint System can be deployed for cells with 14 mile diameters (for rural and highway coverage) as well as much smaller cells for traffic "hot spots" with a range, for example, of 250 feet (a much shorter range than the capability of other mobile systems). The Oranipoint System can thus provide more localized capacity than other mobile systems, in some cases as much as 100 times more capacity per assertable assa.

<u>Wireline-Quality Voice</u>. The Omnipoint System can support wireline quality voice service which is currently unavailable from other mobile systems. This quality is particularly important for both PCS and WLL applications.

High-Speed Data Services. The Omnipoint System offers superior data transmission characteristics and supports transmission of auditmedia images and digitized compressed video. The Omnipoint System design is capable of wirelessly supporting ISDN rates. In contrast, other existing mobile systems generally have limited (i.e., less than 19.2 kbps) data transmission capabilities, are ill-suited for wireless office applications and are not capable of transmisting comparable data rates.

### · Compatibility with Existing Infrastructure

Compatibility and Flexibility With Existing Network Architectures. The Omnipoint System architecture provides compatibility and flexibility in telecommunications network design. It can be integrated into either GSM networks, AIN networks or LEC central office switching networks. Omnipoint is initially integrating its base stations with GSM systems, which enhances the Company's ability to sell its equipment in the 70 countries where GSM has been deployed or selected for deployment. The Omnipoint System can be integrated with a variety of existing interconnection networks, including those of the LEC, CATY and other wireless systems. Additionally, private systems can be designed using the equivalent of Omnipoint's base station controller, whereas smaller systems can connect a PBX or Centrex directly to a base station using standard analog lines.

Interoperability of Public and Privately Owned Networks. The Omnipoint System is capable of being designed for use in both the Econord PCS spectrum as well as the unlicensed bands allocated for cordless home phones and wireless PBXs. A single handest could operate in a mobile environment and as a cordless phone for indoor use. Competing cellular and other mobile systems are generally much more expensive to deploy on a large scale within effices and homes and can only offer compressed low bit rate voice and very low speed data transmission in such environments.

Software Architecture. The Omnipoint System is designed around a software architecture that provides the flexibility to interconnect to a number of different network infrastructures. Moreover, end users and service operators can develop their own application to take advantage of the Omnipoint System's flexible protocol.

Several manufacturers are currently in discussions with the Company to manufacture subsystems based on the Company's technology. Given the advantages of the Omnipoint System and its ability to interface with other network standards, PCS service operators may choose to deploy networks that combine systems based on the Company's technology with those from other manufacturers. The Company also intends to license its technology to manufacturers of company systems. There can be no assurance that the Company will be successful in selling the Omnipoint System to PCS service operators or to license its technology.

#### Competition

The competition in the wireless telecommunications equipment industry is intense. The industry consists of major domestic and international companies, including those companies currently providing equipment to cellular providers, most of which have substantially greater financial, technical, marketing, sales, manufacturing,

advances in the wireless telecommunications industry, there can be no assurances that new archaelogies will not evolve that will compare with the Company's products. distribution and other secources then those of the Company. The Company will compete with those other companies primarily by selling equipment that provides enhanced features at a lower cost. Given the maid

the mobile PCS industry. In addition to the Company's technology standard, three competing technology standards have emerged in

ucchnology, and it is widely believed to be a leading contender for further deployment, particularly for operators without U.S. cellular properties. PCS 1900 is likely to be the first to market with available equipment since the system is based on well-established technology and faces no major burdles in upbanding for PCS deployment in the U.S. Certain PCS 1900 manufacturers predict limited quantities of equipment to be available in 1995, although it is widely believed that algorificant quantities of equipment will not be available antil 1996. Because Omnipoint is integrating its system with GSM, Omnipoint System equipment can be combined with PCS 1900 equipment in a single natwork. Accordingly, operators that select PCS 1900 represent additional potential crustomers for Omnipoint System equipment. for digital 900 MHz cellular telephones. PCS 1900 is a TDMA-based technology supported by Ericason, Motorcia, NOKIA Mobile Phones and Northern Telecom. Five U.S. service operators have committed to this PCS 1900 is a modified version of the Buropean RF technology used to access the standard GSM network

IS-95 CDMA is the CDMA standard proposed to upgrade existing analog cellular service to digital. Qualcomm is the primary proposest of IS-95 CDMA for PCS service. IS-95 has also received support from Monrota, AT&T and Northern Telecom. IS-95's service supporters lackede Bell Atlantic, NYNEX, US West and AirTbuch Communications Inc., who have announced their intention to deploy a modified vertion of this technology at 1.9 GHz, through their consertion, PCS Primeco, L.P. Sprint Tolecommunications Venture has also stated it intends to only negotiate with CDMA venture at this time.

IS-S4 TDMA is the TDMA standard that several cellular carriers are implementing as they upgrade to digital. Primary network suppliers are AT&T, Ericason and Hughes, AT&TAMcCave Cellular, SBC Communications, Inc. ("SBC"), Bell Admeic, BellSouth and Bell Canada are the primary 800 MHz service supporters. McCave Cellular and SBC have declared that they will deploy systems based on IS-S4 at 1.9 GHz, defined as IS-136 TDMA, IS-S4 TDMA, like PCS 1990, faces no major unchrological hardles in upbanding to 1.9 GHz PCS. Upbanded IS-S4 TDMA equipment is expected to become generally available in 1996.

# Stretegic Relationships

# Northern Telecom Relationship

In 1994, the Company entered into a non-exclusive agreement to integrate its suchaciogy with Northern Telecom's established network architectures. Pursuant to the agreement, the parties will integrate the Omnipoint System with Northern Telecom's digital OSM and AIN control office switches. Omnipoint will deploy the Omnipoint/CSM integrated system in Omnipoint's New York MTA service area and has also agreed to jointly attet integrated systems throughout North America.

The integrand system will offer wheless voice services including mobile coverage at competitive prices. The system will initially use a GSM interface between Omnipolar's RF access technology and the digital switches. Use of an available network interface such as GSM should assure the timely deployment of PCS Operating Compenies for their on systems utilizing Omnipoter's uchnology. Omnipotes and Northem Telecom also plan to integrate Omnipotes's technology with Northem Telecom's AIN Class 5 switches, which today are primarily and to Regional Bell trai office switching

well as a vendor financing agr Northern Telecom and the Company have signed a series of equipment OEM and supply agreements, as a vendor financing agreement. Northern Telecom will make varying payments as it purchases core varying payments as it purchases core

electronics (primarily radio and digital cards for base stations) and software from the Company. Northern Telecom has already made an initial \$3.0 million license payment (part of up to \$12 million in license and OEM fees to be paid to the Company under certain circumstances) and may make additional royalty payments based upon shipments of Omnipoint products. Northern Telecom will then sell Omnipoint/Northern integrated systems to PCS operators, including the Company. The Company's purchases to build out the New York network will be financed by Northern Telecom under the NT Credit Facility. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources." Northern Telecom has executed a commitment letter to extend the financing commitment from \$382.5 million to \$612 million on substantially the same terms. If a definitive agreement is reached, the Company expects to use these funds in New York or other BTA markets which the Company may acquire in the Entrepreseurs' Band section.

The initial pilot network is scheduled to be delivered and installed in New York in early 1996. Ournipoint and Northern Telecom have assounced that their integrated systems will be introduced commercially for sale to other PCS operators in early 1997.

## JRC Relationship

JRC and the Company executed an MOU providing the underlying basis upon which the parties would cooperate to provide technical development, manufacturing, marketing and sale of PCS handests employing Omnipoint technology. The parties have entered into an agreement for engineering services (the "Engineering Services Agreement") and continue to negotiate definitive agreements for the semainder of the parties' arrangements addressed in the MOU which are non-binding unless such agreements are executed. The Engineering Services Agreement governs Omnipoint's purchase of various forms of engineering and technical services from JRC necessary for the integration of JRC's proprietary design of plastics and handware into the initial construction phase of a PCS handest for use in a PCS System employing Omnipoint's technology. The MOU provides, subject to the negotiation and execution of definitive agreements, that (i) JRC will grant a license to Omnipoint for the use of JRC's technology and other proprietary information and provide Omnipoint with such components as are necessary for Omnipoint to construct and manufacture test model handests; (ii) Omnipoint will grant a license to JRC to use Omnipoint's technology and proprietary information and Omnipoint will supply JRC with the proprietary computer chips necessary for JRC to commercially manufacture and sell PCS handsets for use in a PCS System employing Omnipoint's technology; and (iii) JRC will sell and supply the Company with PCS handsets for commercial sesale and use by the Company's PCS customers.

#### PacBell Rosming Arrangement

The Company has signed an MOU with PacBell to develop a PCS network that will provide both PacBell and Omnipoint subscribers with rounting capability in the New York MTA and two California MTAs. The memorandum is not binding until incorporated in definitive agreements. PacBell won PCS licenses for Los Angeles and San Francisco MTAs, covering appreximately 31 million POPs. Additionally, PacBell and the Company will conduct joint tests of Omnipoint's technology and plan to work together to establish PCS infrastructure and handest standards and conduct joint marketing efforts. See "—Service Business—Rouning Arrangement with PacBell."

#### Regulatory Environment

The PCC regulates the licensing, construction, operation and acquisition of wiseless telecommunications systems in the U.S. pursuant to the Communications Act of 1934, as amended, and the rules, regulations and policies promulgated by the PCC theseunder (the "Communications Act"). Under the Communications Act, the PCC is authorized to allocate, grant and demy licenses for PCS frequencies, establish regulations governing the interconnection of PCS systems with wireline and other wireless carriers, grant or deep license senewals and applications for tunafer of control or assignment of PCS licenses, and impose fines and forfeitures for any violations of PCC regulations.

## PCS Linewing

icense and participate in the specific regarding each of the above casegories. bands for broadbeard PCS services. The Commission distinguished the licenses along four dimensions: (i) amount of RF spectrum—30 MHz vs. 10 MHz; (ii) size of prographic srea—MTA vs. BTA; (iii) eligibility to own the license and participate in the specific suction for each type of license; and (iv) the siming of the suctions The FCC established PC3 service areas in the U.S. based upon Rand McNally's market definition of 51 MTAs comprised of 493 smaller BTAs. In hase 1994, the PCC finalized the allocations of the 1.85 to 1.99 GHz

and 10 MHz of spectrum, respectively, and reserved for "Entrepreneurs." See "—Service Business—Expanding Service Opportunities." The D and E Blocks are each 10 MHz and will be available for all section participants. Blocks C, D, E and F have not yet been suctioned. Since D and E licenses are open for general bidding, the inegion cellular operators are expected to win those licenses. The semaining 20 MFz of the 140 MHz of spectrum geographically to MTAs (these are the Block A licenses grassed to the Piessers in their respective MTAs). The 30 MHz MTA suction ended in March 1995, and the PCC grassed those licenses in June 1995. Four licenses designated as Blocks C, D, B and F were allocated as BTAs. The C and F Block licenses were allocated 30 MHz regilable was allocated for undicensed PCS applications such as wincless PBX adjuncts, LANs and home cordens Licenses may be revoked at any time for came. The FCC decided that only two 30 MHz licenses, designated as Blocks A and B, would be allocated es. All PCS licenses will be granted for a 18-year period, at the end of which they must be renewed

In the event the Changesty displaces a saicrowave incumbent, the Company must pay the microwave incumbent's nebcation expenses and take actions accessary to put the microwave incumbent's new facility into operation. The Company expects to implement a frequency plan that will minimize to the extent possible the number of existing microwave users that need to be relocated. relocated. In an effort to belance the competing interests of existing anisonwave users and newly authorized PCS Econoses, the PCC has adopted a transition plan to relocate such anisonwave operators to other spectrum blocks. receive interference from the operation of PCS networks and, as a result, may have to be negotiated with or The New York MTA network will operate in the spectrum now pustially occupied by private and common carrier fixed microwave users. Many of these microwave incumbents provide services that may interfere with or

# Pionaer's Proference Program

of the PCC's Pioneer's Profesence program and pursuent to an PCC order, Omnipoint was awarded a profesence to apply for a license not subject to competing applications to provide service in the New York MTA. The Company received its license for the New York MTA commissing of 30 MHz of PCS spectrum (1830 to 1865 MHz and 1930 to 1945 MHz) in December 1994. The final terms of the Pioneer's Profesence awards are contained in the logislation for the Grantal Agreement on Tariel's and Track ("OATT"). Consepoint is one of only three recipions of a broadband PCS Pioneer's Preference license. Under the terms

to the Picness' Preferences (Le., the everage is based on the per POP prices for 40 licenses), times (ii) the sensible of 1990 POPs in each of the Picness's MTAs. Based on the final round of the A and B Block auctions, the Company will pay \$13.16 per (1990) POP or \$347.5 million. This discounted price is 78.5% of the vinning bid in the auction for the B Block 30 MHz New York MTA license. Persuant to the terms of the GATT legislation, each of the Picasers will pay for its license a sum equal to 15% of the product of (i) the average per POP price paid in the suctions for the libranes in the top 20 MTAs based on population, not including the time MTAs in which only one 30 MHz license was to be suctioned due

The GATT belianten probablis the PCC from reconsidering its December 1993 Report and Order with respect to granting final proferences to the those Pioneers. The legislation also mandates that the decisions are not subject to further administrative or justicial review. The Ploasers are allowed to pay for their licenses in installments over five years with interest only for at least the first two years (and possibly all five years) with the interest rate and the timing of the principal and cash interest payments to be established by the PCC in a later

rule making. No payments of principal or innerest are due until all outstanding higation concerning any aspect of the license or payment terms is resolved. In this regard, there are four cases pending at the United States Court of Appeals for the District of Columbia Circuit that in some respect challenge the RCC's award of a Froncer's Preference and PCS license to the Pioneers. The lead case is Frances. Degineering Associates. Inc. v. FCC, prohibited administrative or judicial seview of the grast. See "-Litigation." of Section 801 of the GATT, which directed the PCC to grant the Company the New York MTA License and Nos. 95-1185, et al., in which the Court of Appeals for the D.C. Circuit will consider the constitutional validity

the FCC sess the payment terms, such as the interest rate and the timetable for payment of the principal. The FCC has indicated that its staff would not work on such an order until after the court cases are resolved. Assuming that all related pending cases are either most or dismissed, and that the FCC issues its payment order on a timely basis, the payment of interest generally could not begin earlier than sometime during the first or second quarter of 1996. Of course, if the missed cases challenging the preference or the focuse survive the decision in the GATT case, or if further judicial review of the GATT case is sought (i.e., rehearing at the Court Oral argument in the lead case is scheduled for February 23, 1996. The Court is likely to render a decision in April or May 1996. Assuming Section 801 of GATT is determined to be constitutional, the related cases challenging the license or the preference will become moot, or, alternatively, the parties may decide to distrist the related cases. This would result in the carliest timestable under which the Company would be required to begin extended until all challenges are resolved. of Appeals for the D.C. Circuix or appeal to the U.S. Supreme Court), the payment date would be further making payments on the Loruse (initially only interest would be due). No payments can be made, however, until

Company, however, believes that the ultimate outcome on these issues may be financially less onerous. periods or payment dates for interest or to payment dates for principal. For soccuming purposes, the Company has taken the connervative position of accruing interest at the prime rate since the license insurance date. The Accordingly, to dute there has been so definitive FCC or court guidance with respect to rates, account

## Conditions on Lionas

compliance with the PCC's holding period and attribution rules. Rule violations could sesuit is license two-thirds of the population within 10 years. Licensess that fail to meet the coverage requirements may be subject to footeinine of the license. The FCC will conduct random audits to ensure that licensees are in All 30 MHz broadband PCS licensees, including the Company, must construct facilities that offer coverage to at least can-third of the population in their service area within five years of their initial license grants and to revocations, forfeitures or fines.

The Company believes it can readily achieve these requirements became over 7.3 million people, or 27.7% of the MTA's population reside in New York City's the boroughs alone. Planned coverage of just one of Omnipoint's 20 BTAs, the New York BTA, which includes the five boroughs of New York City, northern New Jersey, Long Island, Wentherser County and Painfield County, will cover 18-3 million people, or 68.3% of the MTA's population, than entirfying the 10 year buildont requirement.

agreements, management agreements or other documents disclosing would receive in return for the transfer or assignment of its license. I holds a PCS license or PCS system generally may be bought or seld. Preference PCS licenses contain a provision prohibiting an assignment. The Communications Act requires the PCC's prior approval of the assignment or transfer of control of a PCS license. In addition, the PCC has established transfer disclosure requirements that require licenses who which the Company has provided coverage for one-third of the license area's population Houses until the earlier of three years after the license grant (i.e., not before December 1997) or the date on after control of or satign a PCS licease within the first three years to file associated contracts for sale, option corrects, management agreements or other documents disclosing the sond consideration that the applicant sald receive in return for the transfer or assignment of its licease. Non-controlling insertes in an entity that The Communications Act requ see or PCS system generally may be bought or said without prior PCC approval. The Pioneer beauce counts a provision probabling an assignment of the license or a transfer of control of

based. The condition expires upon the system providing coverage for one-third of the population of the MTA. While the FCC has never defined the phrase, the Company believes that its present plan to the Omnipoint/GSM System to build out the New York MTA network will satisfy the "substantial use" condition. system that "substantially uses" the design and sechnology upon which the Fierners' Preference award was The Company's New York MTA liberate contains a condition that requires the Company to construct a PCS

# Citizenship Requirements

common carrier liceasee disectly, or more than 25% of the parent of a common carrier liceasee. Non-U.S. citizens may not serve as officess of a common carrier liceasee's beauth of directors, although up to emp-fourth of the board of directors of a common carrier liceasee's parent may be non-U.S. citizens. The PCC has authority to permit the parent of a liceasee to exceed the 25% limit if it finds the public interest would be served, but it does not have the authority to permit a liceasee knelf to exceed the Under the Communications Act, non-US, citizens or their representatives, foreign governments, or corporations otherwise subject to domination or control by non-US, citizens may not own more than 20% of a 20% limit on foreign ownership.

Failure to comply with these requirements may result in the FCC issuing an order to the entity requiring divestiture of their ownership to bring the entity into compliance with the Communications Act. In addition, present foreign ownership in violation of the Communications Act. fines, a denial of renewal or revocation of the license are possible. The Company has no knowledge of any

# Patents and Other Intellectual Property Rights

believes, however, that the auccoastal development of its technology generally depends more upon the experience, technical know-how and creative ability of its personnel rather than on ownership of patents. As of June 30, 1995, Omnipoint has received nine patents on its core technology, has 50 U.S. and 44 foreign patent applications pending and is propering 26 applications for thing. The Company will continue to file patent applications as capineering developments occur. The policy of the Company is to apply for patents or other appropriate or stateoury protection when it develops valuable new or improved technology. The Company

will not be infringed upon or designed around by others or that others will not obtain patent that the Company would need to Rosses or design around. If existing or finare patents containing broad claims are uphald by the courts, the holders of such patents might be in a position to require companies to obtain licenses. There can be no assumances that Rosses that might be required for the Company's products would be available on reasonable terms, if at all. To the extent that Rosses are materiable, or are not available on accoptable terms, no assurance can be made that the failure to obtain a license would not adversely impact the Company. The states of patents involves complex legal and factual questions and the breach of claims allowed is succession. Accordingly, there can be no measured that patent applications filed by the Company will result in patents being issued or that its patents, and any patents that may be issued to it in the facture, will afford protection against competitors with similar sacknology; nor can there be any assurance that patents issued to the Company

customers and supplies, non-dischance and non-competition agreements with employees and committents and other security measures. Although the Company intends to protect its rights vigorously, there can be no assurance The Company attempts to project its trade secrets and other proprietary information shough agreements with hat these measures will be successful In addition to secking passes protection, the Company relies on trade secrets to protect its proprietary rights

The Company's principal administrative offices are located in leased space in Arlington, Virginia and the principal location of its sales, marketing, support, research and development facility is located in approximately 51,384 square fact of leased space (increasing to approximately 68,512 square fact in August 1996) in Colonado Springs, Colorado. The Virginia lease and the Colonado sublease are pursuant to agreements which expire in February 1996 and August 1997, respectively.

## Employees

sales, marketing and product management and 29 in administration and finance. The Company's future success will depend in significant part on the continued service of its key technical, sales and senior management personnel. Compatition for such personnel is increase and there can be no assumance that the Company can retain its key managerial, sales and archnical employees, or that it can attract, assimilate or retain other highly qualified actuated, sales and managerial personnel in the future. None of the Company's employees is represented by a labor union. The Company has not experienced any work stoppages and considers its relations with its employees to be good. As of September 30, 1995, the Company had a total of 164 employees, including 123 in engineering, 12 in

## Lidgation

There are four pending cases at the U.S. Court of Appeals for the District of Columbia Circuit that in some respect challenge the Pioneer's Preference Program or payment terms for the Company's Pioneer's Preference award or the New York MTA License. The following summarizes the material pending cases that involve the Pioneer's Preference award or the New York MTA License.

Freeman Engineering Associases, et al. v. FCC, (No. 95-1185) now pending in the U.S. Count of Appeals for the D.C. Cirvuit will consider certain constitutional issues regarding Section 801 of the GATT, which directed the PCC to grant the Company in license and directed that the preference and the license are no longer subject to administrative or count neview. Under review in a related case, in the PCC's Reconsideration Order, which dismined publishes for reconsideration of the Ficanser's Professors awards on grounds that the potitions were most because of GATT. See "—Regulatory Havironment—Pleaser's Professors Program." In other related cases, petitioners are challenging the PCC's grant of the Company's license as unknown! and the PCC's payment plan for the picanser Romes (such plan was supermoded by GATT). The Company balleves that the thingsion regarding the constitutionality of the GATT provision will be favorably reactived, as a seast of which the other cases relating to its forces will be rendered moot. In the event that this lifegation is not favorably reactived another case entitled Frieman Engineering Associance, at al. v. PCC (the. 94-1779 et al.) will be heard by the Court of Appeals for the D.C. Clevek. In that case, commenced in 1994, Pineman Engineering, Advanced Cordines Technologies, Inc. and others seek to have the Court find the PCC's reconsideration order negarding Pinemer's Professors unlawful and remard the menter to the PCC for firether proceedings which could, but need not, involve the Company's Pinemer's Professors or the New York MTA License.

The Company is not currently aware of any other pending or threstened litigation that could have a material adverse effect on the Company's business, operating results or financial condition.

## EXHIBIT 3 NORTEL NEWS RELEASE DATED SEPTEMBER 19, 1995

## News Release



FOR IMMEDIATE RELEASE

September 19, 1995

Contact: Mark Buford Nortal (214) 684-8512 mark buford@ot.com

Mark Vonaex Omnipoint (719) 548-1200

Omnipoint, Northern Telecom (Nortel) Increase PCS Supply Agreement to \$250 Million,
Plan Pilot IS-661 Network Deployment On Wall Street By Year End

NEW YORK—Omnipoint Corporation has increased its five-year supply agreement with Northern Telecom (Nortel) from \$100 million to \$250 million for personal communications network equipment and services for the New York Major Trading Area (MTA) and other potential Omnipoint operating areas.

The agreement also calls for initial deployment of a pilot Personal

Communications Services (PCS) network, using Omnipoint's IS-661 technology, in the

Wall Street financial district of New York City by the end of 1995.

Nortel and Omnipoint have also signed a vendor financing agreement under which Omnipoint can borrow the necessary funds to ensure rapid buildout of its markets.

Nortel will deliver a turnlesy digital PCS network integrating Global System for Mobile Communications (GSM) standard mobility switching and services with Omnipoint's IS-661 base station radio equipment.

"Nortel's ability to deliver a hybrid PCS natwork based on GSM and Omnipoint's unique IS-661 spread spectrum radio frequency access technology is important to our success," said Doug Smith, president, Omnipoint. "We're eager to install the first PCS alternative for fully mobile, full service PCS in the 1850-1990 MFz bands."

Nortel and Omnipoint have a separate agreement, announced last year along with the original supply agreement, to sell low-cost, full mobility PCS networks based on the same technology to other operators in North America.

"This combination will offer cost and service advantages, particularly when it comes to offering integrated mobility services."

Nortel and Omnipoint plan to evolve this hybrid network architecture over time to include advanced intelligent network (AIN) technology, enabling a closer integration of wireless and wireline services.

Personal Communications Services, operating in the 1.9 GHz radio spectrum allocated in the US by the Federal Communications Commission (FCC), are expected to stimulate continued, rapid growth in demand for mobile voice, data, facsimile, and messaging by officing these and other services to business and residential usurs.

IS-661 has been adopted as a North American standard for 1.9 GHz PCS. IS-661 is based on unique composite CDMA/TDMA (code division multiple access/time division multiple access) technology developed by Omnipoint. The GSM standard has been adopted by more than 100 mobile telephone service operators in 70 countries:

Omnipoint, a small, high-technology, entrepreneurial from based in Colorado, was awarded the Ploneer's Preference PCS license for the New York MTA at a cost of \$350 million.

Nortel is one of the world's most broadly diversified developers of communications products, systems and networks in three key market segments - Enterprise Networks, Wireless Networks, and Carrier Networks (switching, broadband, and network applications solutions). Nortel provides equipment, services and network solutions for information, entertainment, and communications networks operated by telephone companies, personal and mobile telecommunications companies, cable TV companies, corporations, governments, universities and other institutions wouldwide.

Nortel had 1994 revenues of SUS 8.9 billion and has approximately 57,000 employees worldwide.

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## EXHIBIT 4 PACIFIC BELL NEWS RELEASE DATED SEPTEMBER 21, 1995

#### FOR IMMEDIATE RELEASE:

September 21, 1995

## FOR MORE INFORMATION:

Lou Saviano, 415 394-3744

## Pacific Bell Mobile Services Forges Alliances To Advance GSM Services throughout the U.S.

PCS companies working to expand customer "roaming," share product ideas and develop full-feature services for all customers

PLEASANTON, CA. -- Pacific Bell Mobile Services (PBMS) today announced that it and four other companies which soon will be offering wireless Personal Communications Services (PCS) are working on several fronts to ensure that the next generation of wireless services will be "feature-rich," easy to use and more affordable than cellular service is today.

The initial companies -- Bell South Personal Communications, Omnipoint, Western Wireless, Powertel and PBMS -- recently purchased licenses from the Federal Communications Commission to provide PCS services. Their combined service areas cover about 100 million potential customers -- over 35 percent of the total U.S. population. The companies hold licenses in most major markets, including New York, Los Angeles, San Francisco, Portland, Jacksonville and Charlotte.

The companies, which previously have announced they will use the North American version of Global System for Mobile Communications (GSM) in their PCS networks, also are collaborating on product development initiatives, as well as joint purchasing agreements, market research plans, SIM card applications development, and operational support systems evaluation and implementation.

"This is much more than a roaming agreement," said Terrence Valeski, Vice President of Marketing and Business Development at PBMS. "We see great opportunities in product development, joint marketing and strengthening our buying power. We believe that by working together, we can come to market sooner, with a more complete product offering at lower cost to consumers. Forming alliances with GSM operators domestically and internationally is a natural step in creating value for our customers. GSM is already used in 70 countries throughout the world."

The companies already have initiated work to provide a seamless roaming capability, making it easier for customers to enjoy many of the same service features and convenience when they travel to each other's service areas as they do in their "home" territory. For example, PCS customers will not need to call ahead and make special arrangements or register when travelling, as cellular customers often must do today. "We already have been working effectively on common technical issues," Valeski added. "By extending this relationship to include marketing and product development, we can more quickly introduce innovative and affordable wireless products. This alliance will help us integrate our customer care systems and processes to make it easier for customers to use PCS throughout the country."

Pacific Bell Mobile Services plans to begin offering PCS services widely throughout California and Nevada early in 1997.

Pacific Bell Mobile Services is the wireless communications subsidiary of Pacific Bell.

Pacific Telesis Group, the parent company of Pacific Bell and PBMS, is a diversified telecommunications corporation based in San Francisco.

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## EXHIBIT 5 OMNIPOINT NEWS RELEASE DATED JULY 13, 1995



Contacts:

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LaDawn Bly, JRC International

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Colorado Springs, CO

July 13, 1995

## For Immediate Release:

## JRC INTERNATIONAL TO WORK WITH OMNIPOINT TO PRODUCE PCS HANDSETS FOR IS-661 CDMA/TDMA STANDARD

JRC International Inc. and Omnipoint Corporation amounced today that JRC will license Omnipoint's PCS technology and develop and manufacture PCS handsets incorporating IS-661 technology.

Omnipoint's composite CDMA/TDMA technology was recognized by the FCC with the award of a "Pioneer's Preference" PCS license and has recently been approved by the US standards bodies as "IS-661". The first markets to select Omnipoint's system for PCS, the New York Major Trading Area, has 27 million "pops" and nearly 30% of the US telecommunications traffic. The companies expect handsets to be available to PCS operators in 1996.

According to Omnipoint President, Doug Smith, "This agreement with JRC is a key step in assembling a team of world class manufacturers that are fulfilling the promise of this unique technology." Omnipoint's other partners include Nortel (formerly Northern Telecom) who is providing complete turnkey PCS networks based on IS-661. Other infrastructure and handset partnerships are being finalized and will be announced shortly.

JRC is known world-wide s a radio and marine electronics manufacturer and as one of the largest suppliers of handsets for the Japanese cellular phone market. In 1994, JRC expanded its presence into North and South America with the establishment of JRC International whose primary function is to manufacture and distribute wireless communications products.

"JRC's many years of experience in developing extremely small, high quality, low cost analog and digital handsets positions them very well to meet the needs of PCS customers," said Smith. "We are delighted to be working with them on PCS handsets, and expect this agreement will make JRC a major supplier for our PCS operator subsidiary, Omnipoint Communications, Inc."

Under the terms of the agreement, IRC will assist Omnipoint in the development of a first generation handset that will be available in the second quarter of 1996. A second generation handset, designed by JRC will go into production in late 1996. According to JRC International president, Dave McDowell, "our relationship with Omnipoint puts JRC on the fast track for entry into the PCS market. The credibility that comes with being given the Pioneer's Preference award, the inherent benefits afforded by this technology and their relationship with Nortel convinced us that adopting the IS-661 standard was consistent with our corporate strategy and direction."

The handset currently in development will be best of class in terms of size, weight, styling, talk time and features. "By combining our cellular expertise with Omnipoint's innovative air-interface protocol, we are certain we will be able to deliver a quality product that meets the needs of the operators and the end users, " said McDowell. "We are also pursuing products to take advantage of the considerable data capabilities of IS-661 based systems."

IS-661 was developed specifically for the challenges of the new PCS marketplace, unlike other PCS standards which were originally designed to add capacity to analog cellular systems. "The primary benefits of IS-661 include greatly reduced infrastructure costs and deployment time, wintline quality voice, and high speed data and digitized video capability," says Smith.

Omnipoint Corporation is a fast growing, privately held company based in Colocado Springs, Colocado. It was incorporated in 1987 to commercialize the spread spectrum and networking technologies that its founders had developed in the aerospace and defense industries.

IRC International Inc., headquartered in Ft. Worth, Texas is a subsidiary of Japan Radio Co., Ltd, a \$1.8 billion company based in Tokyo, Japan, JRC International is an OEM supplier to many of the nation's largest communications providers, including AT&T, BellSouth Mobility, Auto Club Cellular, Cantel and others. A fully automated surface mount manufacturing facility is located in Lethbridge, Alberta, Canada and an advanced R&D facility is located in Ft. Worth.

## EXHIBIT 6 OMNIPOINT NEWS RELEASE DATED DECEMBER 12, 1995



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Colorado Springs, CO

December 12, 1995

## For Immediate Release:

## ERICSSON AND OMNIPOINT SIGN A \$350 MILLION MEMORANDUM OF UNDERSTANDING

Richardson, Texas — December 12, 1995 — Ericsson and Omnipoint.

Corporation announced today that they signed a Memorandum of
Understanding (MOU) for over \$250 million worth of Omnipoint IS-661 and
PCS 1900 network equipment and services. The MOU also includes \$40
million worth of IS-661 and PCS 1900 mobile telephones, and \$60 million of
IS-661/PCS 1900 dual mode phones.

Under the terms of the MOU, Ericsson will acquire a multi-million dollar license for Omnipoint's IS-661 technology. Ericsson may also purchase from Omnipoint on an OEM basis components used in Mobile telephones and IS-661 base stations. Under a supply agreement, financing will be provided.

IS-661 and PCS 1900 are the two new U.S. standards that utilize the GSM-based network architecture. GSM-based systems have been adopted by over 85 countries and had over 10 million subscribers worldwide at the end of the third quarter.

Omnipoint was awarded a PCS Pioneers' Preference license for the New York Major Trading Area (MTA) which covers 27 million people.

Omnipoint is also participating in the "C-Block" auctions to acquire additional PCS licenses and has placed a deposit covering an additional 89 million people.

When combined with the supply agreements amounced earlier with Nortel and JRC International, Omnipoint anticipates purchasing over \$700 million of PCS equipment and services. The equipment will be deployed in Omnipoint's New York MTA as well as other markets acquired in the C-Block auction.

"Ericeson is very pleased with this business relationship," says Jan-Anders Dalenstam, executive vice president, Ericeson Inc., Radio Systems. "Omnipoint has assembled a very strong team of management and employees, and Ericeson is looking forward to working with them and the IS-661 technology."

"Having Ericsson join Nortel as our key network partners ensures that Omnipoint will have an unsurpassed wireless network for the world's premier wireless market — New York," said George Schmitt, president of Omnipoint Communications, Inc., the Omnipoint subsidiary that operates the PCS networks.

Omnipoint is a world leader in the commercialization of spread spectrum radio systems. Omnipoint was recognized by the Federal Communications Commission (FCC) for its many innovations in PCS with the award of a Pioneers' Preference 30 MHz license for the New York Major Trading Area.

Ericsson's 80,000 employees are active in over 100 countries. Their combined expertise in switching, radio and networking makes Ericsson a world leader in telecommunications.

## EXHIBIT 7 PACIFIC TELESIS NEWS RELEASE DATED NOVEMBER 20, 1995

FOR IMMEDIATE RELEASE

**NOVEMBER 20, 1995** 

## PCS Providers in U.S. Form North American Interest Group to Promote "GSM" Wireless Technology

PLEASANTON, CA. — The leaders of seven companies licensed to develop Personal Communications Services (PCS) networks in the United States announced today they have banded together to advance the development of high quality digital wireless communications services in North America.

The seven companies are: American Personal Communications, American Portable Telecom, Bell South Personal Communications, Intercel, Omnipoint, Pacific Bell Mobile Services and Western Wireless Co. Together, the group holds licenses to cover over 125 million of the United States' population, including 12 of the top 25 cities.

All the companies plan to use a technical platform called "Global System for Mobile Communication," or GSM — a digital communications technology adopted by more than 150 wireless providers in nearly 80 countries around the world. The GSM platform supports the PCS 1900 standard as well as the IS-661 standard which members of the group will be trialing.

proven, but offers superior quality and features over all other wireless systems. Because of its global adoption and growing use by over 10 million customers worldwide, it is more cost effective and technically refined than other network solutions.

The companies will form the North American Interest Group of the international "GSM MoU" — an association of wireless communications providers around the world using GSM-based systems. The North American Interest Group will manage GSM technology standards throughout North America, deal with interoperability issues, and coordinate efforts with the international GSM community.

"This is an important step in establishing a structure to support North America's participation in the worldwide GSM community. It will provide a good forum for new GSM operators to quickly acquire knowledge about GSM

- more -

technology advantages and participate in its future development," said Lyndon Daniels, president of Pacific Bell Mobile Services and newly elected chairman of the GSM Interest Group.

The seven companies also agreed to work closely together in developing common business solutions in order to take full advantage of the exploding market for wireless communications services in the United States. Joint activities relating to volume handset purchases, marketing research, product development, business systems development, andother related activities will be evaluated for potential common effort.

"American Portable Telecom's participation in the group advances our goal of providing national and international coverage for our customers and ensures a coordinated approach to innovative service development," said Don Warkentin, president and chief executive officer of APT.

"GSM is ready to put into service now," said John Stanton, chairman of Western Wireless Co. "This gives Western Wireless and other GSM-based providers a distinct competitive advantage in being able to offer services to customers sooner than those providers who choose other technology platforms."

GSM-based PCS providers will offer customers better sound quality, greater call privacy and better protection from unauthorized use than do conventional cellular systems.

One of the many benefits GSM-based systems is that customers can "roum" easily worldwide. A unique feature of the system is the "smart card," which contains an individual subscriber's personal calling features, preferences and other information, separate from the wireless handset. The smart card is about the size of a credit card and can be carried by a subscriber using other GSM systems around the world.

American Personal Communications recently has deployed the first commercial PCS system throughout a population base of more than eight million people in Washington, D.C., Maryland and Virginia. APC has teamed with the Sprint Telecommunications Venture, a partnership between Sprint and the nation's largest cable companies. The alliance is building a nationwide network giving future customers access to an unprecedented scope of communications services.